

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0044644, AI 38521, PER20080001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Clayton
Town of Clayton WTP
P.O. Box 277
Clayton, LA 71326

- II. **PREPARED BY:** Rachel Davis

- DATE PREPARED:** December 18, 2008

- III. **PERMIT ACTION:** reissue LPDES permit LA0044644, AI 38521, PER20080001

- LPDES application received: September 11, 2008

- EPA has not retained enforcement authority.

- LPDES permit issued: February 1, 2004
- LPDES permit expired: January 31, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Clayton.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located on the southern end of Loomis Street within the limits of the Town of Clayton, Concordia Parish.

- D. The treatment facility consists of **four** partially aerated lagoons, with a sand filter and a chlorine contact chamber.

- E. **Outfall 001**
 - Discharge Location: Latitude 31° 42' 41" North
 Longitude 91° 32' 41" West

 - Description: treated sanitary wastewater

 - Design Capacity: 0.133 MGD

 - Type of Flow Measurement which the facility is currently using:
 V-Notch Weir and Continous Recorder

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V. RECEIVING WATERS:

The discharge is into a parish drainage ditch, thence into Kimball Bayou, thence into Bayou Cocodrie, thence into Red River in segment 101605 of the Red River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 101605 of the Red River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 101605 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 101605 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Rachel Davis
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits:**

Subsegment 101605, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 101605 was previously listed as impaired for dissolved oxygen for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 101605:

Bayou Cocodrie Watershed TMDL for Biochemical Oxygen-Demanding Substances

"The *Bayou Cocodrie Watershed TMDL for Biochemical Oxygen-Demanding Substances*" stated that there were no point source discharges within Subsegment 101605; therefore, no wasteload allocations were specified in the TMDL. Due to the distance and the discharge route to Bayou Cocodrie, the Town's sewage treatment plant is not expected to impact the waterbody. Therefore, to address dissolved oxygen, BOD limits are proposed in the permit in accordance with the SSELTP."

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	11.1	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELTP) for facilities of this treatment type and size.
TSS	16.6	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS

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Effluent Characteristic	Monthly Avg (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
				effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., Sanitary dischargers must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0044644: Issued: February 1, 2004
Expired: January 31, 2009

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

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XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates that no inspections have been done in the last two years

B) Compliance and/or Administrative Orders

A review of the files indicates that no compliance orders have been issued against the facility

C) DMR Review

A review of the discharge monitoring reports for the period beginning **September 2006** through **September 2008** has revealed the following violations:

Period of Excursion	Parameter	Outfall	Permit Limit	Reported Quantity
October 2008	Fecal	001	200	2232
	Fecal		400	3591
September 2008	BOD	001	15 mg/l	17 mg/l
	Fecal		200	368
	Fecal		400	545
August 2008	BOD	001	10 mg/l	12 mg/l
	TSS		15 mg/l	26 mg/l
	TSS		23 mg/l	29 mg/l
	Fecal		200	997
	Fecal		400	2027

*Please note that before August 2008 no DMR's had been submitted since March of 2005.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

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Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.133 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.133 \text{ MGD} \times 10 \text{ mg/l} = 11.1 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038644.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

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Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Clayton, Town of Clayton WTP, September 11, 2008.

Invoice No. _____

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**LOUISIANA WATER POLLUTION CONTROL FEE SYSTEM
RATING WORKSHEET**

PERMIT NO: LA0044644; AI 38521; PER20080001

1. a. Company Name: Town of Clayton
b. Facility Name: Town of Clayton WTP
2. Local Mailing Address: P.O. Box 277
Clayton, LA 71326
3. Billing Address (If different):
4. Facility Location: the southern end of Loomis Street within the limits of the Town of Clayton
Concordia
- a. Parish:
5. Facility Type: privately owned treatment works
a. Treatment Process Used: four partially aerated lagoons, with a sand filter and a chlorine contact chamber.
6. Products Produced:
a. Raw materials stored or used:
b. By-products produced:
7. Primary SIC Code: 4952
a. Other SIC Codes:
8. Fac. Manager: Mr. Rydell Turner
a. Telephone: (318) 757-6576
9. Owner:
a. Telephone:
10. Env. Contact:
a. Telephone:

11. State Permit No.:	12. NPDES Permit No.
a. Date Issued:	a. Effective Date:
b. New: Modified:	b. Expiration Date:

13. Number and Identification of Outfalls: One, 001
14. Number of Injection Wells:
15. Water Source(s):
16. Receiving Water(s): parish drainage ditch, thence into Kimball Bayou

Is receiving water:

- a. Public Water Supply Yes () No (x)
- b. Designated Water Quality Limited Yes (x) No ()
- c. In Compliance with Water Quality Standards Yes (x) No ()

17. River Basin: Red River
18. Basin Segment No. 101605

Federal Tax I. D. No.:

Initials of Rater: rod

TOTAL RATING POINTS ASSIGNED 5.266

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ANNUAL FEE RATING WORKSHEET
PERMIT NO: LA0044644; AI 38521; PER20080001

1. **FACILITY COMPLEXITY DESIGNATION**

Primary SIC 4952

Complexity Designation = X I (0 points)
 II (10 points)
 III (20 points)
 IV (30 points)
 V (40 points)
 VI (50 points)

COMPLEXITY DESIGNATION POINTS 0

2. **FLOW VOLUME AND TYPE**

A. Wastewater Type I

Is total Daily Average Discharge greater than 60 mgd?

 Yes, then points = 200

 No, then

Points = 0.5 X Total Daily Average Discharge (mgd)

Points = 0.5 X =

Total points =

B. Wastewater Type II

Is total Daily Average Discharge greater than 5 mgd?

 Yes, then points= 50

 No, then

Points = 10 X Total Daily Average Discharge (mgd)

Points = 10 X =

Total points =

C. Wastewater Type III

Is total Daily Average Discharge greater than 25 mgd?

 Yes, then points= 50

 X No, then

Points = 2 X Total Daily Average Discharge (mgd)

Points = 2 X 0.133 =

Total points = 0.266

FLOW VOLUME AND TYPE POINTS 0.266

3. **POLLUTANTS**

A. BOD₅ or CBOD₅

Daily Average Load =

8.34 lb/gal x 0.133 MGD x	<u> </u> 50 lb/day	(0 points)
XX mg/l = lb/day	<u> </u> > 50 - 500	(5 points)
	<u> </u> > 500 - 1000	(10 points)
	<u> </u> > 1000 - 3000	(20 points)
	<u> </u> > 3000 - 5000	(30 points)
	<u> </u> > 5000 lb/day	(40 points)

COD or

Daily Average Load =

<u> </u> 100 lb/day	(0 points)
<u> </u> > 100 - 500	(5 points)
<u> </u> > 500 - 1000	(10 points)
<u> </u> > 1000 - 5000	(20 points)
<u> </u> > 5000 - 10000	(30 points)
<u> </u> > 10000 lb/day	(40 points)

BOD OR COD DEMAND POINTS _____
 (whichever is greater)